What is claimed is:

1. A composition suitable for reducing engine sludge and degradation of elastomer seals comprising

a major amount of an oil of lubricating viscosity and

- a minor amount of a nitrogen-containing dispersant wherein the nitrogen containing dispersant is a reaction product of
- (I) a hydrocarbyl-substituted succinic acylating agent, wherein no more than about 20 mole percent of the individual molecules thereof have a hydrocarbyl substituent with a molecular weight of less than 500; wherein the hydrocarbyl substituent is a polymeric species consisting essentially of olefin monomer units of at least 3 carbon atoms; and
  - (II) at least one polyamine, wherein the polyamine is
- (a) a polyalkylene amine containing at least one H-N< group; or
- (b) a condensate of (i) a polyalkylene amine containing at least one H-N< group with (ii) at least one alcohol containing at least one ether group, amine group, nitro group, or additional alcohol group;

wherein in said polyamine (a) or condensed polyamine (b) no more than about 20 mole percent of the molecules contain 6 or fewer nitrogen atoms.

2. The composition of claim 1 wherein the substituent groups in (I) are derived from a polyalkene characterized by a  $\overline{M}_n$  value of about 1000 to about 10,000.

3. The composition of claim 2 wherein  $\overline{M}_{D}$  is at least about 2000.

- 4. The composition of claim 1 wherein the substituent groups in (I) are derived from one or more homopolymers or copolymers of olefins of 3 to about 16 carbon atoms.
- 5. The composition of claim 4 wherein the olefins are predominantly terminal olefins.
- 6. The composition of claim 4 wherein the substituent groups are derived from one or more homopolymers or copolymers of olefins of 3 to about 6 carbon atoms.

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- 7. The composition of claim 6 wherein the substituent groups are derived from polybutene, polypropylene, or mixtures thereof.
- 8. The composition of claim 6 wherein the substituent groups are derived from polybutene in which at least about 50 mole percent of the monomer units are isobutylene units
- 9. The composition of claim 1 wherein the acylating agent is characterized by the presence within its structure of an average of at least about 1.1 succinic groups for each equivalent weight of substituent groups.
  - 10. The composition of claim 1 wherein the acylating agent is characterized by the presence within its structure of an average of at least about 1.3 succinic groups for each equivalent weight of substituent groups.
  - 11. The composition of claim 1 wherein within (I), no more than about 15 mole percent of the individual molecules have a hydrocarbyl substituent with a molecular weight of less than 500.
  - 12. The composition of claim 1 wherein within (I), no more than about 10 mole percent of the individual molecules have a hydrocarbyl substituent with a molecular weight of less than 500.
- 13. The composition of claim 1 wherein within (I), no more than about 5 mole percent of the individual molecules have a hydrocarbyl substituent with a molecular weight content of less than 300.
- 14. The composition of claim 1 wherein the alkylene moiety of the polyalkylene amine of (IIa) or (IIb) is ethylene.
  - 15. The composition of claim 1 wherein for (IIa), less than about 10 mole percent of the polyamine molecules contain six or fewer nitrogen atoms.
- 16. The composition of claim 1 wherein for (IIa) less than about 5 mole percent of polyamine molecules contain six or fewer nitrogen atoms.

17. The composition of claim 1 wherein the alcohol of II(b)(ii) is of the formula

$$R^{1}_{m}X - R^{2} - (R^{3}OH)_{n}$$

5 wherein:

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X is O or N;

m is 1 when X is O and 2 when X is N;

each R<sup>1</sup> is independently hydrogen, a hydrocarbyl group, a hydroxy-hydrocarbyl group, or, if X is N, each R<sup>1</sup> can be O so as to form a NO<sub>2</sub> group;

 $R^2$  is a hydrocarbylene group or an ether-containing group, having n+1 sites of linkage

R<sup>3</sup> is an alkylene group of 1 to about 4 carbon atoms; and n is 1, 2, or 3.

- 18. The composition of claim 1 wherein the alcohol of II(b)(ii) is a di- or tri-ethanolamine.
  - 19. The composition of claim 1 wherein the alcohol of II(b)(ii) is trimethylolpropane.
  - 20. The composition of claim 1 wherein the alcohol of  $\Pi(b)(ii)$  is pentaerythritol.
- 21. The composition of claim 1 wherein the alcohol of II(b)(ii) is tris(hydroxymethyl)amino methane.
  - 22. The composition of claim 1 wherein the alcohol of II(b)(ii) is tris(hydroxyethyl)amino methane.
- 30 23. The composition of claim 1 wherein the alcohol of II(b)(ii) is a polyoxyalkylene alcohol.
  - 24. The composition of claim 1 wherein within (IIb) the condensed polyamine is prepared by reacting about 1 to about 3 equivalent of the polyamine with 1 equivalent of the alcohol in the presence of an acid catalyst.

- 25. The composition of claim 1 wherein the nitrogen-containing dispersant is prepared by reacting (I) the hydrocarbyl-substituted succinic acylating agent with (IIa) the polyethylene polyamines.
- The composition of claim 1 wherein the nitrogen-containing dispersant is prepared by reacting (I) the hydrocarbyl-substituted succinic acylating agent with (IIb) the condensed polyamine.
- 27. A method for reducing the formation of sludge and the degradation of seals in an engine, comprising lubricating said engine with the composition of claim 1.
  - 28. A composition suitable for reducing engine sludge and degradation of elastomer seals comprising

a major amount of an oil of lubricating viscosity and

- a minor amount of a nitrogen-containing dispersant wherein the nitrogen containing dispersant is a reaction product of
- (I) a hydrocarbyl-substituted succinic acylating agent wherein the hydrocarbyl substituent is prepared from a polymeric species consisting essentially of olefin monomer units of at least 3 carbon atoms and wherein no more than about 20 mole percent of the individual molecules of said polymeric species have a molecular weight of less than 500; and
  - (II) at least one polyamine, wherein the polyamine is
- (a) a polyalkylene amine containing at least one H-N< group; or
- 25 (b) a condensate of (i) a polyalkylene amine containing at least one H-N< group with (ii) at least one alcohol containing at least one ether group, amine group, nitro group, or additional alcohol group;

wherein in said polyamine (a) or condensed polyamine (b) no more than about 20 mole percent of the molecules contain 6 or fewer nitrogen atoms.

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